

**Intergenerational Family Resource Allocation
Summary of a Grantee Research Workshop
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Introduction

This workshop brought together twenty grantees supported by the National Institute on Aging (NIA) and the National Institute of Child Health and Human Development (NICHD) as part of the Intergenerational Family Resource Allocation Request for Applications (RFA) that was published October 2002.¹ The goals of the RFA were to further understanding of how decisions are made in allocating family resources across generations and how public policy affects these allocations. The RFA focused on how private family resource allocation decisions result in improvements in health, wealth accumulation (including human capital), and well being for children, active adults, and the elderly, and how public policy interacts with family processes to alter these results.

The purpose of the workshop was to bring together grantees of this RFA, who represent several different disciplines, including economics, sociology, demography, pediatrics, and child development, so that participants could present their projects to each other, engage in discussion about important methodological and data collection issues, and create an informal, interdisciplinary network of researchers doing “cutting edge” work on the general topic of intergenerational family resource allocation.

In his opening remarks, Dr. V. Jeffery Evans (NICHD) explained the goals of the workshop as follows:

- To bring together researchers doing work related to children with those doing work in the aging field so that researchers from both groups would be aware of developments in these fields;
- To familiarize researchers doing work in economics with relevant work in child development and aging; and
- To ensure that the two major funding agencies that support work in the area of intergenerational family resource allocation are “on the same page” in terms of topics that are of interest to both agencies.

Dr. Evans added that since the funding agencies had invested in this work, they wanted to maximize its potential in terms of generating ideas, identifying future research needs, and analyzing how this work fits into developing ideas in the field of intergenerational family resource allocation. While Dr. Evans acknowledged that this was a lofty goal, he explained that the tone of the workshop was meant to be informal such that grantees were encouraged to raise issues, problems, ideas, or suggestions.

¹ See <http://grants.nih.gov/grants/guide/rfa-files/RFA-HD-02-030.html>

Dr. Elayne Heisler (NIA) added to Dr. Evan's remarks by explaining that the NIA was pleased to collaborate on the RFA and had a long-standing interest in understanding intergenerational processes and the complex interplay of factors that affect family decisions. She described the Behavioral and Social Research Program at the NIA and its long history of supporting interdisciplinary research related to intergenerational processes, including research in behavioral genetics, cognitive psychology, and behavioral medicine.

Session 1: Origins of Intergenerational Behavior

Presenters: Donald Cox • Mark Wilhelm • Robert Pollak • Jennifer Romich

Dr. Cox discussed his research on the relationship between intergenerational transfer behavior and two distinct but related "biological basics." First, a biological mother always has complete certainty that her offspring are related to her, whereas, a father never can be certain completely about his relatedness to his children. The second is that differential gamete size between the sexes implies that men can literally "go forth and multiply," while women can only "go forth and add." This creates a conflict of interest in mating that pits the genders against each other. Dr. Cox cited a study by Esther Duflo that uses South African pension receipts and transfers to examine gender differences in cross-generation transfers. Previous studies on this topic have looked to exogenous factors (such as regime change) but have not considered basic demographic data. For example, Dr. Cox presented a finding that among all combinations of grandparent and grandchild that allow cross-generation transfer, maternal grandmothers gave more to their granddaughters. Dr. Cox noted that based on the "basics" outlined earlier, this is the only intergenerational transfer that guarantees resource allocation within the same line of genetic descent. This is paralleled in findings that paternal grandparents will contribute more to children if the daughter-in-law has a strict view of marriage. Dr. Cox noted that demographic variables often are treated as exogenous variables to be controlled by economists, whereas, he uses them as possible explanations; a comprehensive analysis would specify a causal model including such factors.

Dr. Wilhelm presented preliminary findings from his study of the childhood family structural and income dynamics associated with young adults' helping behaviors (defined as charitable giving, volunteering, and modeling helping to their children). The study models the development of helping behaviors in early adulthood from the developmental course of prosocial behavior, placing particular emphasis on both early childhood and adolescence. In addition, there is reason to believe that disruptions in family structure and/or income may impact outcomes differentially based on when they occur in a child's life. In the data presented, disruptions occurred in thirty-five percent of the sample, with twelve percent experiencing two or more changes in family structure prior to young adulthood. Dr. Wilhelm presented some preliminary findings from his analyses. First, secular giving was influenced by family income during adolescence (negative association) and by being without the biological mother during early and middle childhood (sixty-five percent less likely to give). Helping behavior was influenced by the presence of the biological mother throughout childhood (negative) and negatively associated with income during early childhood, but positively associated with income during middle childhood. Dr. Wilhelm, noted, however, that these findings were quite preliminary because in some cases not all controls were introduced into the models and, in some cases, Cox tests were not used to choose family structure specifications.

Dr. Pollak presented his research on family decision making regarding the long-term care of parents of adult children using game theory as an organizing framework to explain caregiver long-term care provisions and arrangements made for elderly, partnerless mothers. Specifically, the project focused on the application of demonstration effect and punishment effect games to determine the strategic choices made by adult children when making decisions about long-term care for elderly parents. This framework provides for a two-stage, multiperson game where the first stage is the decision about living arrangements for the parent, and stage two focuses on transfers. Dr. Pollak presented a sharing rule to represent the equilibrium state of stage 2 but acknowledged that this is inefficient for a number of reasons. To look empirically at the implications of these models of intergenerational family interactions, Dr. Pollak has been studying both spouses and children as caregivers. Preliminary data presented by Dr. Pollak from a study of informal care decisions made by adult children as caregivers suggest that the bargaining power of noncoresident children increases as siblings (begin to) coreside with the parent and that noncoresident children recognize this power in decisions regarding intergenerational transfers.

Dr. Romich presented data from her mixed-methods study of resource allocation within families, which seeks to describe the mechanisms through which children and young adolescents contribute to resources within households and bargaining models that result in children claiming household resources, and to examine how children's contributions and claims impact well being within families. Dr. Romich's study includes an ethnographic study of forty-six low-income families for which she is able to map resource flow to and from children. Based on interviews, a set of possible characterizations can be made to describe the relationship between a family member's resource contributions and his or her demands. The study will explore next the differences in power within the family that children hold based on their characterizations. Preliminary findings from the National Longitudinal Survey of Youth (NLSY) and Adolescent Health data suggest that children do not exchange work for their allowances nor do they report greater autonomy when their mothers work. This leads to the need to develop a valid bargaining model to reconcile resource allocation within families. To date, Dr. Romich has been working with a modified Nash cooperative framework, incorporating development into the model to capture movement toward a threat point as a child grows older and potentially challenges a parent for power over resource allocation.

Discussion

There was a great deal of discussion about the biological model of intergenerational resource allocation. According to this approach, children always want more than parents are willing to give. It was noted that postmenopausal grandmothers can provide great help and contribute to families up until they are no longer able. Biological theory suggests that in cases when grandmothers can no longer contribute, they may suggest that their children go home and take care of their own children. This makes sense from an extended fitness perspective in that they do not want to take away family resources that otherwise would be used for their grandchildren. In contrast to other species, one participant noted that there are no grandparents in the wild. Another remarked that there was some evidence that postmenopausal animals provide resources that increase survival. There was discussion about possible experiments on the role of "smells" in animal species and determinants of bonding in humans. Three challenges to the evolutionary perspective were raised: (1) homosexuality, (2) adoption, and (3) demographic transitions. Dr.

Evans noted that economics, biology, and psychology all have something to contribute to this research, and he raised the question, what do we need to do as a field?

Participants suggested several directions for next steps:

- Examine different expressions of biology and genes in different economic groups to explore how contexts may influence gene expression;
- Move beyond a nature/nurture approach to a model of nature in concert with nurture, as current work suggests;
- Analyze mechanisms by which nature and nurture interact, specifically, examination of variables and processes that intervene between genetics and behavior;
- Map models that include stepchildren and the different relations that may be important (e.g., attachments to biological parents versus stepparents); and
- Look at interventions to determine what is important in this regard.

Session 2: Pathways to Intergenerational Behavior

Presenters: John Henretta • Arland Thornton • Maximiliane Szinovacz • Nancy Reichman • Flavio Cunha (PI: James Heckman) • Andrew Mason

Dr. Henretta presented early findings from his analysis of five cohorts of adults over age fifty, with a focus on family cultural background contributions to making decisions regarding long-term care. The multi-cohort design allows for both a between-families analysis as well as a change-over-time analysis that considers changes within families (e.g., widowhood) and cohorts. The study specifically examines the demonstration hypothesis as well as the hypothesis of generalized change. In general, the study revealed relationships expected by a demonstration model; marital status, health, and age showed expected effects on receipt of help, as did early receipt of help and earlier grandmother coresidence. There was a negative association between net worth and receipt of help, although this effect varied by cohort. Dr. Henretta's analysis also showed that stepchildren were less likely than biological children to provide support during long-term care.

Dr. Thornton's research is based on the assumption that attitudes, beliefs, values, preferences, and cultures underlie and provide motivations for marriage, cohabitation, childbearing, and childrearing. These factors are not constants; they vary across groups, societies, and times, and they are disseminated from one group to another and one person to another. Dr. Thornton has focused on the parental family, the family behavior of parents and children, education, and different kinds of curricula. The dependent variables in his work are attitudes, values, beliefs about childrearing, the importance of marriage, and gender. Empirical analyses rely on several data sources that each includes measures from two generations: (1) The Intergenerational Panel Study of Parents and Children, (2) The National Survey of Families and Households, (3) The National Survey of Children, and (4) Monitoring the Future. The findings Dr. Thornton presented suggest that there is a substantial amount of transmission of attitudes, beliefs, and

values; these correlate between parents and children born eighteen years later. They also suggest that religion and religiosity are important, with religiosity being more important than religious affiliation. For example, parents who are highly religious have larger families, place higher importance on marriage, and the genders divide. Many of these effects operate through the attitudes and values of parents themselves. For example, divorce changes parent attitudes, which in turn, appears to change child attitudes. In one experiment, the gender double standard was examined by randomizing the order in which parents were asked about their beliefs in regard to a son and daughter. Results suggested that there was a significant double standard, with parents having much stricter attitudes about daughters; interestingly, however, if parents were asked about daughters first, they showed more consistency in their attitudes toward sons and daughters. Other results suggest that men demonstrate more of a double standard than do women, and less educated persons show more of a double standard than those with more education. Other analyses have indicated that attitudes and behaviors operate both ways and do so both within and across generations. Finally, other analyses have examined the role of education and schooling; these findings suggest that both education and curriculum matter in shaping attitudes and beliefs. In future work, Dr. Thornton hopes to expand these analyses beyond families to examine ideas of equality, liberty, and changing the world. He also hopes to expand the work internationally, for example, to examine the spread of ideas from the West to the non-West.

Dr. Szinovacz presented data from her project intended to identify family support networks, factors that influence change in care networks and caregiver careers, and the outcomes associated with changes in these networks. Dr. Szinovacz presented data on changes in patterns of sibling support as caregivers, indicating that care is typically short-term and rarely provided by more than two siblings at any one time. If longer-term care is provided, changes in primary caregivers are quite common, especially among minorities, parents with numerous children, and among respondents who have siblings of both genders. Dr. Szinovacz also presented data on the division of care between spouses, including factors that contribute to division of labor and the role of the parental relationship to each spouse. Findings from this series of analyses using the Health and Retirement Study (HRS) data suggest that filial responsibility norms override gender ideology to some extent and that men take some responsibility for elder care, but this seems to be restricted to care for their own kin, and these norms moderate the effect of other predictors of a husband's involvement. The provision of care was affected by kinship; care for the wife's parents is more contingent on the wife's perception of joint endeavors and the number of wife's siblings, while care for the husband's parents depends more on the husband's health, the wife's employment, and the allocation of care among the husband's siblings.

Dr. Reichman reported findings from her study on the effects of child health on family structure and income using the Fragile Families and Child Wellbeing Study dataset. Dr. Reichman reviewed previous findings on these relationships, noting that poor child health (indicated by a birth weight of less than four pounds, or failure to walk or crawl by twelve months of age, or identified disability) decreases the likelihood that parents of a one-year-old child live together by ten percentage points; decreases the probability that a mother is employed by eight percentage points and her hours of work per week by three percentage points; reduces the probability that a father is employed by eight percentage points; and increases the probability that a mother relies on Temporary Assistance for Needy Families by five percentage points. Dr. Reichman shared the results of her latest analyses that focus on the price responsiveness of prenatal drug use and the effects of prenatal drug use on infant and child health. Her analyses leverage on state variation in

prices. Dr. Reichman reported her findings that the demand for illicit drugs among pregnant women is responsive to drug prices. Further, drug use participation elasticities are higher than for the general population, which may be explained partially by the nature of the sample and methods (a young, poor sample of pregnant women combined with a measure of drug use that likely captures casual and more elastic drug use that is not picked up in interviews). Finally, estimates of prenatal drug use from self-reports should be used with caution since they are lower than those derived from medical records.

Mr. Cunha began his presentation with a review of several established relationships between family factors (income, single parenthood, broken home) and adult and child cognitive and noncognitive functioning. With data from the NLSY, Mr. Cunha showed that statistically controlling for key sociodemographic factors during childhood greatly reduced or eliminated differences in important child outcomes. With findings from the Abecedarian Project in North Carolina (as reported in the literature by Dr. W. Steven Barnett), Mr. Cunha described the large and sustaining impacts that early childhood programs have on a range of longer-term outcomes (including IQ, special education referrals, grade repetition, high school completion, and college attendance). These data provided the foundation for Dr. Heckman's and Mr. Cunha's project, which explores the technology of skill formation, seeking to identify and measure skill formation, as well as identifying the implications of resource investment in skill formation during early or later periods in child development. A critical distinction made in this work is that childhood consists of two distinct periods during which investments may be made. Without such an assumption, the timing of investments does not appear to be critical. However, when examining complementarity and self-productivity as dual parameters of the technology of skill formation, Mr. Cunha showed that for outcomes of interest, there is both high complementarity and high self-production. Mr. Cunha concluded, therefore, that the timing of investment in the development of later skills is indeed critical, and employing the Aiyagari/Laitner economic models and imposing fiscal constraints on potential family investments suggest that delaying investment is at best inefficient and may not be sufficient to overcome earlier deficiencies.

Dr. Mason presented preliminary findings from his and Dr. Ron Lee's multinational study of National Transfer (NT) Flow Accounts in varying social, economic, and political contexts to develop projection models that can be used to assess the effects of economic change, aging, family systems, and public policy, and to study the evolution of support systems. Dr. Mason presented preliminary data charting consumption and productivity across the life cycle, using data from Japan and Taiwan. Dr. Mason also presented aggregate NT Flow Account data from Taiwan, charting components of age-related reallocations and components such as public and private transfers, bequests, and reallocations. The pattern of flow was similar for Taiwan and the United States. The financing of consumption among young dependents also is similar across the two countries; however, there are marked differences in the financing of consumption among older dependents (age sixty-five or more). Dr. Mason emphasized that these findings were preliminary and need further technical refinement.

Discussion

A number of issues were raised in response to the presentations from this session including questions about underlying models, additional variables to consider, and problems in conducting research on high-risk samples.

In reference to Dr. Szinovacz's study, one participant noted that her model of care considered only personal care and suggested that it may be important to look at other types of care as well (such as financial assistance for care and/or making arrangements for care). With regards to Dr. Reichman's presentation on poor child health, a number of challenges were discussed. First, one participant noted that in this study, there was high concordance between self-report and medical records review for smoking behavior. Dr. Reichman noted a similar concordance in her data, as well as concordance between self-report and medical record documentation of alcohol use but reiterated that for drug use, self-report and medical records review yielded different estimates. There was discussion about the possibility that child health may be nonlinearly related to parental investment. One participant commented that the responsiveness of a very severe health problem to treatment may encourage support in ways generally not seen for problems that are nonresponsive. Another participant added that a child with very severe health problems may be abandoned rather than supported, while a second participant noted that in such cases if the child is not abandoned, the result would be a very large investment by the parents. Dr. Reichman commented that in looking at large samples, this would imply an estimate of the average expenditures across all families with similarly ill children.

The presentation by Dr. Cunha generated a number of questions regarding the applicability of the complementarity and self-productivity model in the cognitive context for noncognitive outcomes and how the technology of skill may be related across domains. Dr. Cunha reiterated that his analysis concentrated on the type of cognitive outcome and that the complementarity and self-productivity for noncognitive outcomes may and probably does vary. He used as one example the impact of a program targeted at adolescents, which found no impact on IQ but did have an impact on a range of noncognitive outcomes, such as juvenile arrests and teenage pregnancies. One participant noted that these differences, then, made the question about when to invest in order to maximize returns for child outcomes a much more complicated task and that while Dr. Cunha's data suggested a three-to-one ratio in efficiency in investing early to produce cognitive outcomes, different problems may prove to be addressed more efficiently later rather than earlier. This led to a discussion about the importance of considering different skills both independently and in interaction with each other. Dr. Cunha noted that this is especially important in teasing out critical periods, the utility of which is linked to understanding how skill sets evolve, and in identifying whether or not there are critical periods for some skills and not others, and if there are critical periods, determining when they occur.

Dr. Mason was asked about the pricing of time in his model. He noted that his collaborator, Dr. Ronald Lee, previously had published some work on the valuation of time and that it would indeed be of interest but may be beyond the reach of the study at this point. There was general agreement that the value of time remains a complex issue in the field. Two respondents asked Dr. Mason about determinations of allocation of such variables as housing expenditures and in a more general way, public contributions to the family, among children in the household. Dr. Mason noted that these factors are prorated for each child using an equivalency scale (unless available for each child individually) and indicated that this also is often a problem in families without children; these are issues the field must address.

Session 3: Public Policy and Intergenerational Behavior

Presenters: Michael Hurd • Meta Brown (PI: John Scholz) • David Blau • Laura Argys • Michael Grossman • Taryn Dinkelman and Vimal Ranchhod (PI: David Lam) • John Hoddinott • Paul Gertler • Joe Kaboski • Frank Stafford

Dr. Hurd presented preliminary findings from his study of annual and lifetime flow of transfers and bequests using eight waves of the HRS. A goal of this project is to develop an economic model that integrates inter vivos cash transfers and bequests, including disposition of housing. To conduct these analyses, Dr. Hurd has constructed a giver file and is completing a recipient file that are linked cross-sectionally and longitudinally, allowing for the analysis of transfers and bequests (and expectations of bequests) with data about both parent and child. Dr. Hurd presented data from the study about financial transfers to children (and their children, if attached) and the persistence of transfers over time. Transfers to children decline steadily in later life possibly because the needs of children differ when parents are in their fifties, while in later life, needs are more equal between parents and children. Also, inter vivos transfers substitute for bequests later in life. When looking at persistence in giving, Dr. Hurd reported high heterogeneity in giving patterns; the average probability of giving was thirty-eight percent with nearly seven percent giving during all six waves of data, and twenty-three percent not giving at all. Finally, using the HRS Asset and Health Dynamics Among the Oldest Old (AHEAD)1998 data for adults age seventy-five or older, Dr. Hurd calculated expected transfers and bequests to children.

Dr. Brown presented work she is conducting with Dr. Scholz on inter vivos transfers, particularly those associated with education. These are both common and substantial in absolute amounts and have high policy relevance due to policies regarding student aid. In understanding how transfers are tied, noncooperative behavior and borrowing constraints are incorporated to examine a model of financial transfers tied to postsecondary education (i.e., “tied transfers”) that pins down the magnitude, timing, and form of parent-child transfers. Using data from both the Health and Retirement Study and the Wisconsin Longitudinal Study, Dr. Brown reported corroboration for the hypothesis that parents with greater transfer liabilities use tied transfers to increase their children’s total educational investments and that tied transfers “buy something” in the form of cash transfer savings on older families’ educational and cash transfers.

Dr. Blau presented findings based on his analysis (with Wilbert van der Klaauw) of the NLSY dataset concerning the family structures within which young children grew up. The goal of the project is to examine the impact of family structure, maternal employment, and family income on child outcomes including cognitive, social, and emotional development; educational advancement; health; and early adult outcomes such as childbearing, employment, wages, and marital dynamics. To date, Dr. Blau and Dr. van der Klaauw have modeled the family structures within which children grew up. These analyses revealed that while approximately two-thirds of children of white mothers spent their childhoods with their biological fathers, this was the case for twenty-eight percent of black children and fifty-five percent of Hispanic children. This likelihood was related largely to the mother’s marital status at birth and less affected by the mother’s marital status at conception for white children than black. The likelihood of the biological father being in the household was highest during the child’s early life, and the risk of

the biological father leaving the household declined with age for both blacks and whites, although the rate of leaving for blacks was about twice as high as for whites.

Dr. Argys presented findings from her study of kin support, child support, and welfare receipt derived from the Panel Study of Income Dynamics 1993 family data and 1997 and 2002 Child Supplements. The study examines a range of questions around the relative frequency with which female-headed households receive each type of support, how these forms of support contribute to the total income for families with nonresidential fathers, and the degree to which the receipt of each form of support is influenced by the presence of other forms of support, as well as exogenous changes in the welfare system. Dr. Argys presented data on the sources of income across families, as well as the components of household income based on differing patterns of types of support received. Dr. Argys found that the majority of families with children with nonresident fathers received some child support, kin support, or welfare, with nearly ten percent receiving more than one type of income. In some cases, these other sources accounted for substantial proportions of the total household income. Dr. Argys indicated that this complex pattern of family support is due in part to the differing guidelines governing each form of formal support (child support and welfare) and to characteristics of the family of origin with regard to kin support. Indeed, the data suggest negative trade-offs between child support, kin support, and welfare. For example, child support receipt significantly reduced welfare receipt.

Dr. Grossman presented findings from his study of the effect of parental educational attainment on children's health and educational attainment. The study capitalizes on a change in compulsory education laws in Taiwan, allowing for an examination of the effect of education on outcomes without the confounding effects introduced by educational attainment decision making. In effect, the change in laws created an experimental condition (more education; children under the age of twelve in 1968) and control conditions. The study also incorporates regional variation in the implementation of new schooling laws through differences in the availability of schools. To complete the study, Dr. Grossman used a set of instrumental variables (e.g., schooling laws, employment rates during high school, school openings) to predict a range of health and education outcomes (including mortality and morbidity, health during childhood and adolescence, probability of attending high school, college attendance and entrance scores, and college rankings). Early findings suggest that a parent's schooling reduces infant morbidity (low birth weight, prematurity), and this effect may be larger for a mother's schooling than for a father's. However, a father's schooling may have a causal impact on infant mortality.

Ms. Dinkelman and Mr. Ranchhod presented findings and future plans from Dr. Lam's project that is focused on family support within the rapidly changing social context of South Africa. Dr. Lam has analyzed data previously collected as part of recurrent national data collection efforts, and there are plans to launch new data collection efforts through the Cape Area Panel Study (CAPS), which is focused on young adults living in Cape Town. The study seeks to pursue a series of research questions, such as the role of the complex household structure in South Africa in intergenerational resource allocation problems, how households respond to shocks such as sudden unemployment or working household member death, the extent to which pensions are distributed across generations, and family response to loss of pension. The study also seeks to describe how young people make the transition from being dependents to contributors and how this interacts with pensions and other sources of household income, and the roles of gender and age at receipt of various sources of income in household consumption, educational choices, and

labor. The CAPS 2006 will focus on family support and intergenerational transfers specifically, including expectations regarding kin obligations and the use of state-provided grants. The presenters summarized findings from analyses of previously collected data that show, for example, that between 1995 and 2000, poverty increased, but this was partly offset by the increase in pensions, as well as improved service delivery to the poorest areas of the country. The availability of data on receipts of pensions, participation in the labor force, and changes in family composition, makes South Africa a dynamic setting for the study of intergenerational transfer.

Dr. Hoddinott presented the background and research plan for his study (funded in September 2004) about the roles played by public and private resources, individual and family preferences, and exogenous shocks and markets, and the interaction of these factors in the allocation of resources and the consequences for family well being across three generations in rural Guatemalan villages. Between 1969 and 1977, the Institute of Nutrition in Central America and Panama (INCAP) conducted a randomized intervention study based on nutrition supplementation for children ages zero to seven years and pregnant and lactating mothers. From 2000 to 2002, the research team was able to locate eighty percent of the children who had participated in the INCAP study. That study provides a rich base dataset upon which Dr. Hoddinott is building to examine processes underlying the allocation of resources across generations, the impact of resource allocation decisions on elderly parents (G1) and grandchildren of G1 (G3), and the role of gender in intergenerational resource allocation. To do so, Dr. Hoddinott is collecting additional data on all three generations, including a physical examination and health survey, a survey of current well being and resource flow and transfers, and life history data. These instruments are being developed in part based on a recently completed socioanthropological study. Preliminary findings from this study suggest that (1) residence and coresidence are on a continuum and are not dichotomous; (2) residency and resource flow partly reflect shocks to G1 and their children (G2) as well as life events; and (3) there is a “demographic divide” where grandparents care for grandchildren.

Dr. Gertler presented findings from his study of the Mexico PROGRESA (Programa de Educación, Salud y Alimentación) Program, which allows for cash transfers to 2.6 million families from 50,000 rural villages in exchange for participation in health and education services (expanded to include 2.1 million families in urban settings in the early 2000s). The program puts in place a rigorous set of expectations, including that cash transfers be used to purchase food and provide pre- and perinatal care for a child. Using a randomized trial model, the team found a strong impact on child health at eighteen months, which persisted even at five years without significant impact on cognitive outcomes. Health benefits included decreased morbidity and rates of anemia, and increased height and weight. The PROGRESA Program is being expanded as a means of breaking the cycle of poverty in Mexico.

Dr. Kaboski reported findings from his evaluation of a large-scale government injection of credit through the Thai Million Baht Village Fund Program, through which villages in Thailand could apply for a one million baht transfer to extend credit locally. The amount of the credit injection was the same across villages regardless of village size, providing a potential exogenous source of variation in treatment per household. One finding that reflects the design of the program is that village size was not related to any of the variables of interest prior to the beginning of the program, but after the program, village size was related to the outcomes of interest. The study

employed a seven-year panel design with 960 households in sixty-four villages and a balanced panel of 800 households. The study collected before and after data on education, assets, investments, income, expenditures in production, borrowing, saving, consumption, occupation, business operated, and household composition. The program had an impact on total short-term new credit, as well as credit for fertilizer (production related), consumption, and agricultural investments, and informal credit in future years. Also, there was an impact on short- and long-term investment decisions and a small increase in combined agricultural and business investments. Following receipt of funds for credit, total consumption increased and assets decreased, and the amount of short-term credit in default decreased. Finally, families more likely were to default if they borrowed to consume than if they borrowed to invest. However, Dr. Kaboski noted that interpreting the impact of the program is challenging because the data reveal impacts that are heterogeneous across households and nonlinear in nature, and the presence of a number of potential outcomes confounds specific interpretation.

Dr. Stafford provided an overview of the Panel Study of Income Dynamics (PSID), funded by a number of federal agencies (U.S. Department of Health and Human Services, National Science Foundation, U.S. Department of Housing and Urban Development) and university sources (Indiana University and the Purdue University Center on Philanthropy). This lineal descent panel archive provides both two- and three-generation data on a set of 63,453 individuals, including more than 70,000 variables reflecting data from 1968 to the present. In 2003, the PSID added an Event History Calendar to its standardized question-list format. Dr. Stafford shared some data on the accuracy of the Event History Calendar against the 1997 gold standard, suggesting validity at least as strong, if not stronger, than the question list that was previously used. Dr. Stafford then provided some examples of how data in the PSID can be used to look at intergenerational transmission issues, first with an overview of studies examining second generation income based on first generation income and employment data, then with an example of a three-generation study of body mass index. Dr. Stafford concluded with an overview of how to access data and tutorials online (see <http://www.psidonline.isr.umich.edu>).

Concluding Session: Future Directions

A number of recommendations for future directions and collaborations emerged from the general discussion. One suggestion was for an intergenerational research network. Another was to have intergenerational forums in professional settings, such as sessions at professional meetings that combine work going on in the child and aging fields. A third was for groups with shared interests to collaborate on particular issues. Some potential cross-cutting themes discussed were the widening gap between the rich and the poor (or equality and inequality of the lifecourse) and well being across the lifecourse.

Participants noted that there are a number of problems with the data that currently are available to them. In particular, available data are often very “dirty,” requiring significant time and effort devoted to data cleaning; however, they also noted that there is a trade-off between having the data sooner and having clean data. A number of participants also considered it helpful for public data providers to make available the constructed variables most commonly used by researchers. There was an extensive discussion of the pros and cons of having created variables made available by the publishers of the data. One solution was for those using the data to make the variables they create available to others. Dr. Evans stated that all researchers have an ethical

responsibility to help others who are seeking to replicate grantee findings; NIH expects both data and metadata to be shared.

In his concluding remarks, Dr. Evans observed that it often is hard to distinguish between an aging project and a child health project. He solicited input on the adequacy of existing data to answer cutting-edge research questions. Several participants considered that the theme of the RFA suggested a primary focus on intergenerational transfers between two people. Yet not much is known about parallel relationships (e.g., husbands-parents). To date, the paradigm under which data are being collected is the individual. However, there are a number of other issues to consider such as, to what extent are there competitive relations occurring? Participants noted that serious intergenerational research must consider multiple sets of relationships; it is time to move beyond data that are individually oriented. Although this is a challenging task, participants believed that meaningful studies still could be conducted. Dr. Evans suggested that one means of doing this was through an R21 planning grant.

Finally, participants indicated that there is still much theoretical and empirical work to be done. In particular, more information is needed about intrahousehold allocation of resources, time, and what constitutes a household. There also are opportunities for more theoretical work and for theorists who examine data.

List of Participants

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